5450neDr1ve2_00014672

EPAct bi-weekly update mtg. 3-24-2009

12 fuels
7 being shipped → next UK
8 in bulk blending
19 fuels at SwRI

1) Light-duty exhaust program (Sobotowski, Hart)
- -Phase 1 (75F) and phase 2 (50F) completed
* -Results of phase 2- planned briefing for Chet (Aron)
- -Data analyzed by George - compares well with DOE splash blend
- -Data shared with DOE along with DOE data sent to us
- -E0/E10/E15 data analysis (fuels 17,18,19): toxics-need other fuels
- -cold start focus – George analysis
- -Phase 3
* -Fuels and blending status -
- -Started testing 3/16:
  - -10 vehicles
  - -EPA E0 and E10 fuels at SWRI on start date
  - -Fuel to be randomized as made available
  - -New prep procedures implemented until we can quantify "hangover"
  - -NMHC formula finalized
  - -Launch with agreed fuels and speciation with toxics group and DOE

All should be there in 3 weeks

- -Additional vehicle testing:
* -FTPs (Chet) Phase 1B on 6 vehicles completed
  - -analysis done find s expected results on sample size/selection
  - -Previous fuel "hangover" on controls discovered – implement prepping changes
- *-NLEV/T1- 2 CRC vehicles – Delayed in phase 3
  - -tie data back to complex model and DOE testing
  - -FTP or LA92 cycle selection still open issue
- -Other options or testing
  - -95F and 20 FLA92 – DOE to pursue
  - -Sulfur NVFEL program to tie back same vehicles
- -OBD data good for all phase 3
  - -need to look at closely to see fuel aromatic and ethanol impacts

2) Oil study (Christianson, Sobotowski, Fernandez) –Report will be issued at later date
- - Mike at CRC week of 3/23 to present some results

3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
- -test cell improvements required – Joe M. trip results
- -sampler equipment required – in-house project
- -NVFEL to do round robin – some PM work – E85
- -Phase 3 above may have additional DOE data

4) Nonroad exhaust program (Caffrey) Intertek/Carnot
* -Fuel 18 testing stautus – done – report timing?
- -Testing and aging (1/2 FUL) completed
  - -Completed engines
  - - handhelds run to FUL - completed
- -Additional testing in conjunction with ARB program (budgeted for 09)
  - -SOW complete for exhaust on indolene and E10
  - -speciated data on ARB program

5) Evap testing (Hart) –
- -E77-2
- -E77-2b -work statement accepted – need additional 100k
- -E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB
- -E77-2c to include E20 – not EPA program

Newer:
-Need to get resolution to drift issue – DOE satisfied and will pay for additions
-FE calculation update – in recalculated phase 1 – available?

This spreadsheet is being updated by Rafal Sobotowski

Vehicles Tested in Phase 3 of EPAct

MAKE	BRAND	MODEL	ENGINE	SWRI NAME	NOx SENS RANK	NMHC SENS RANK	Week of 3/9/2009		Week of 3/16/2009		Week of 3/23/2009		Week of 3/30/2009	
							Vehicle	Fuel	Vehicle	Fuel	Vehicle	Fuel	Vehicle	Fuel
GM	Chevrolet	Cobalt/HHR	2.4L I4	CCOB	5	15	X	2	X	8	X	1*		
GM	Chevrolet	Impala - **FFV**	3.5L V6	CIMP					x		x			
GM	Buick/GMC/Saturn	Enclave/Acadia/Outlook	3.6L V6	SOUT	12	13			x		x			
GM	Chevrolet/GMC	Avalanche/Silverado - **FFV**	5.3L V8	CSIL					X	8	X	9		
Toyota	Toyota	Corolla	1.8L I4	TCOR	9	17								
Toyota	Toyota	Camry	2.4L I4	TCAM	11	6	X	7	X	9	X	8		
Toyota	Toyota	Sienna	3.3L V6	TSIE					X	8	X	15		
Toyota	Toyota	Tundra	4.0L V6	TTUN										
Ford	Ford	Focus	2.0L I4	FFOC	19	2								
Ford	Ford	500/Taurus/Freestyle	3.0L V6	FTAU	4	1								
Ford	Ford/Mercury	Explorer/Mountaineer	4.0L V6	FEXP	18	4	X	8	X	2	X	13		
Ford	Ford	F150 - **FFV**	5.4L V6	F150										
Chrysler	Dodge	Caliber	2.4L I4	DCAL	13	19	X	9	X	8	X	13		
Chrysler	Dodge/Chrysler	Caravan - **FFV**	3.3L V6	DCAR										
Chrysler	Jeep	Liberty	3.7L V6	JLIB					X	8	X	2		
Honda	Honda	Civic	1.8L I4	HCIV					X	7	X	12*		
Honda	Honda	Accord	2.4L I4	HACC	16	11								
Honda	Honda	Odyssey	3.5L V6	HODY	7	16	X	15	X	9	X	2, 12*		
Nissan	Nissan	Altima	2.5L I4	NALT					X	9	X	15, 1*		

*** Five preps required**

Test Fuels Considered for Testing Each Week >>>>>>>>>	2, 7, 8, 9, 15	2, 7, 8, 9, 15	**1**, 2, 7, 8, 9, **12, 13,** 15	

Legend

X	**Tested vehicle**
x	**Replacement vehicle**
red font	**Vehicle receiving 3-bag HC speciation if tested on a fuel requiring speciation**
	1-bag speciation
	3-bag speciation

EPAct Fuels	
Fuel #	EXX
1	E0
2	E0
3	E10
4	E10
5	E0
6	E10
7	E0
8	E0
9	E0
10	E10
11	E10
12	E10

Fuels which require HC speciation	
Fuel #	EXX
3	E10
4	E10
6	E10
7	E0
10	E10
13	E0
14	E0
21	E20
23	E20
27	E15

20-Mar-08

Component, %v	TEST FUEL COMPOSITION AND STATUS																											
	1D	2E	3G	4A	5 Rd B	6D	7E	8C	9G	10G	11G	12C	13C	14D	15F	16G	20C	21A	22B	23A	24B	25C	26B	27C	28D	29	30A	31B
41 (C6s)	0	0	0	0	0	7.6	0	0	0	7.1	0	17.4	0	0	0	0	0	0	0	4.6	2.3	8.1	11.6	0	0	-	17.5	6.8
2	2.7	29.7	22.9	14.3	0	18.3	10.0	10.0	0	0	0	0	17.5	6.0	3.0	9.8	21.2	0	21.2	3.5	13.6	0	0	26.2	10.4	-	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0
4 (C6s)	4.5	0	4.7	0	0	10.4	10.3	4.0	11.0	7.1	5.9	0	8.4	8.9	6.5	5.5	0	4.8	0	8	0	3.8	0	0.9	3.6	-	0	1.8
5	3.1	3.2	3.1	3.0	4.0	3.4	3.8	3.7	2.0	9.0	3.9	8.7	8.3	3.3	4.0	4.0	3.1	4.0	3.1	3.1	3.1	9.2	8.7	3.4	4.4	-	9.7	9.4
6	1.4	1.6	1.5	1.5	2.0	1.5	1.9	1.7	7.0	4.6	2.1	6.7	4.1	2.6	2.0	2.1	1.5	2.0	1.5	1.5	1.6	4.7	6.3	1.7	2.0	-	3.3	3.3
7	0	0	3.0	0	0	0	1.2	0	0	0	0	0	0	1.2	0	0	0	0	0	0	0	0	0	0	0	-	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	0	-	0	0
10	0	0	10.5	0	0	0	0.6	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	-	0	0
11 (Ethanol)	10.5	0	0	10.5	0	10.5	0	0	0	10.5	10.5	10.5	0	0	0	10.5	21.1	21.1	21.1	21.1	21.1	21.1	15.8	15.8	15.8	-	10.5	21.1
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0
14 (C6s)	0	0	0	0	0	1.6	2.5	0	2.7	0	0	0	0	3.0	3.0	0	0	0	0	0	0	0	0	0	0	-	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0
16	3.6	0	0	8.9	9.6	0	0	0	0	0	10.7	0	0	0	0	0	7.9	8.7	7.9	12.7	7.9	0	0	0	0	-	0	2.7
17 (C7s)	0	0	8.9	0	0	0	10.0	10.4	0	0	0	0	0	14.5	0	0	5.7	0	3.4	0	0	0	0	0	0	-	0	0
18 (C8s, C9s)	10.8	12.4	0	9.4	20.3	2.0	6.0	21.3	0	3.9	3.5	0	0	0	0	10.7	7.9	3.3	6.6	0	0	0	0	6.5	14.4	-	0	3.2
19 (C10s)	0	9.3	18.5	6.7	4.4	9.3	3.3	4.3	0	5.5	0	0	0	2.0	0	0	0	2.8	0	10.2	9.1	0.9	0	9.7	0	-	0	3.6
20 (C5)	9.7	0	0	0	1.3	0	4.7	0	9.2	0	0	12.1	1.8	5.2	6.9	0.0	1.5	0	0	0	0	0	11.9	0.0	0	-	12.3	0
21	22.4	0	0	5.4	9.3	0	16.6	8.4	11.0	5.8	10.3	0	14.3	13.5	18.7	8.6	0	5.1	0	0	1.8	0	0	0	0	-	0	5.4
23	0	9.2	0	6.1	3.0	0	0	8.9	5.5	0	4.8	2.5	1.2	0	5.2	0	0	0	5.3	0	5.4	5.2	1.9	0.8	0.9	-	2.0	0
24	3.0	3.2	0	3.0	12.2	3.3	3.8	3.6	13.5	8.9	12.1	8.1	8.2	3.3	15.1	12.5	3.1	12.3	3.1	2.8	3.0	8.9	8.4	3.2	12.5	-	9.5	9.2
25	3.0	3.3	3.0	3.0	12.3	3.4	3.8	3.7	9.4	9.0	12.2	8.2	8.2	3.3	11.0	12.6	3.1	12.5	3.1	3.0	3.1	9.1	8.5	3.2	12.6	-	9.5	9.4
28	21.4	22.4	21.5	21.4	21.6	21.4	20.0	20.0	22.0	21.4	21.4	21.7	21.6	23.0	22.0	21.7	21.5	21.6	21.5	21.6	21.5	21.8	21.9	21.6	21.6	-	21.7	21.5
36	0	0	0	0	0	0	1.5	0	0	0	0	0	0	1.6	0	0	0	0	0	0	0	0	0	0	0	-	0	0
37	4.0	5.7	2.4	6.8	0	7.2	0	0	6.7	7.1	2.6	4.1	6.4	8.0	2.6	1.9	2.5	1.9	2.3	7.7	6.7	7.2	5.0	5.6	1.7	-	4.1	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	At SWRI	**At SWRI**	**Bulk blend in transit to SWRI**	**At SWRI**	Sample@SWRI since 3/6	Sample@SWRI since 3/17	**At SWRI**	**At SWRI**	**At SWRI**	Submitted for blending	**Bulk blend in transit to SWRI**	**At SWRI**	**At SWRI**	**At SWRI**	**At SWRI**	**Bulk blend in transit to SWRI**	**Bulk blend in transit to SWRI**	**Bulk blend in transit to SWRI**	**At SWRI**	**Bulk blend in transit to SWRI**	**At SWRI**	Issues w/T60 and S	Adjustment of S and benzene pending	Submitted for blending	Submitted for blending	**At SWRI** Need inspection data	**Bulk blend in transit to SWRI**	Sample to SWRI since 3/20

Legend

- E0
- E10
- E15
- E20
- CRC (E10 and E20)

Ex. 4 - CBI

Program Timeline

Date	Week #	# of "Valid" Tests Completed	# of Tests Completed	
9-Mar	1	10	12	
16-Mar	2	30	35	
23-Mar	3	50	58	
30-Mar	4	70	81	
6-Apr	5	90	104	
13-Apr	6	110	127	
20-Apr	7	130	150	
27-Apr	8	150	173	
4-May	9	170	196	
11-May	10	190	219	
18-May	11	210	242	
25-May	12	230	265	
1-Jun	13	250	288	
8-Jun	14	270	311	
15-Jun	15	290	334	
22-Jun	16	310	357	
29-Jun	17	330	380	
6-Jul	18	350	403	
13-Jul	19	370	426	
20-Jul	20	390	449	
27-Jul	21	410	472	
3-Aug	22	430	495	
10-Aug	23	450	518	
17-Aug	24	470	541	
24-Aug	25	490	564	
31-Aug	26	510	587	
7-Sep	27	530	610	10 vehicle program (Options 1- 4)
14-Sep	28	550	633	
21-Sep	29	570	656	
28-Sep	30	590	679	
5-Oct	31	610	702	
12-Oct	32	630	725	
19-Oct	33	650	748	12 vehicle program (Options 5- 8)
26-Oct	34	670	771	
2-Nov	35	690	794	
9-Nov	36	710	817	
16-Nov	37	730	840	
23-Nov	38	750	863	
30-Nov	39	770	886	
7-Dec	40	790	909	
14-Dec	41	810	932	15 vehicle program (Options 9- 14)
21-Dec	42	830	955	
28-Dec	43	850	978	
4-Jan	44	870	1001	
11-Jan	45	890	1024	
18-Jan	46	910	1047	
25-Jan	47	930	1070	
1-Feb	48	950	1093	

Assumptions: - Alcohols and carbonyls are speciated in bag 1 of EVERY emissions test
- HC speciation in bags 2 and 3 implies alcohol and carbonyl speciation in bags 2 and 3 of the emissions test

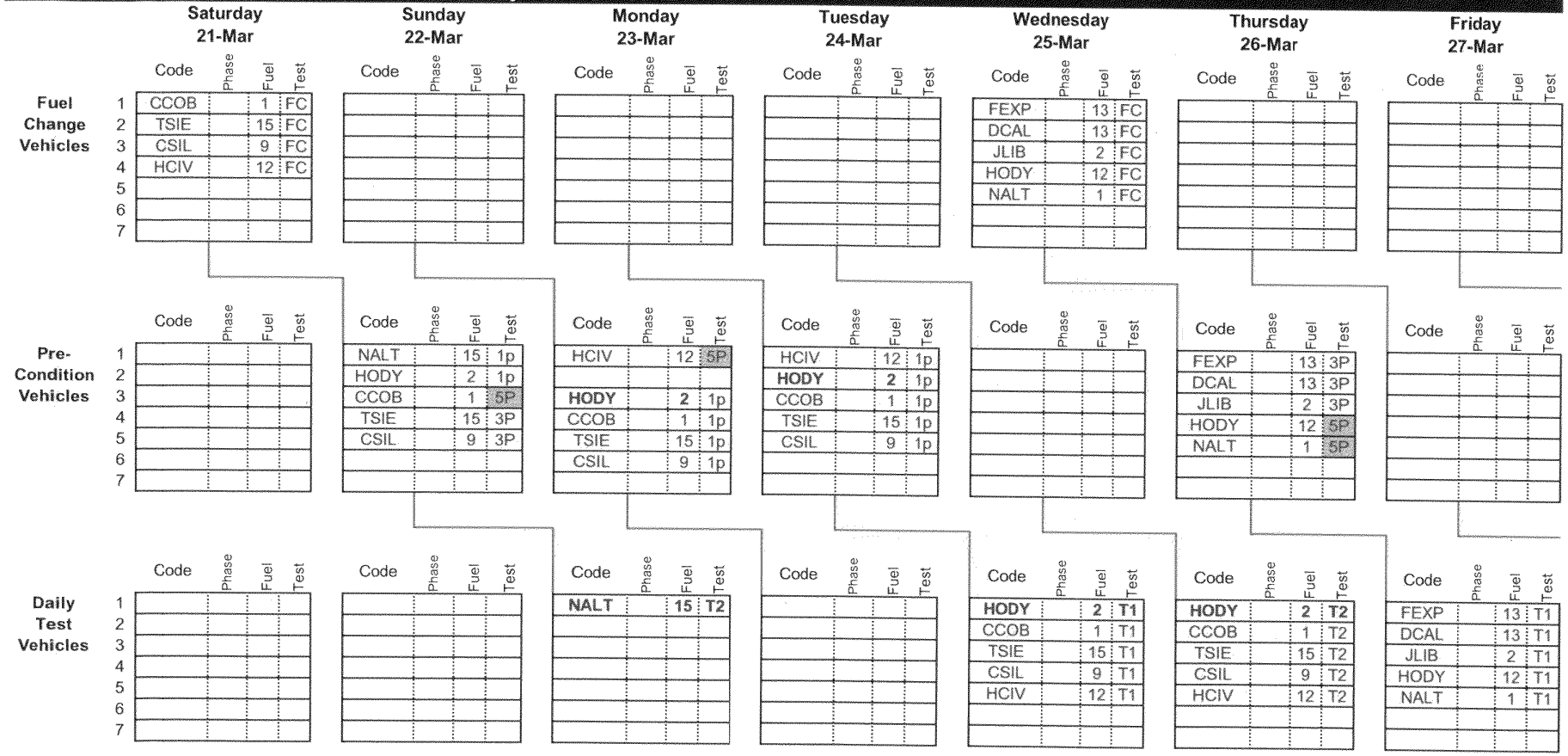
Ex. 4 - CBI

EPA Testing Schedule

Phase 3

Week Beginning Saturday 3/21/2009 to 3/29/2009

If Phil returns on Wednesday



EPAct bi-weekly update mtg. 3-10-2009

Q: how meaningful are 50° PM benefits given funky fuels.

1) Light-duty exhaust program (Sobotowski, Hart)
- -Phase 1 (75F) and phase 2 (50F) completed
  - -Data analyzed by George
  - -Data shared with DOE along with DOE data sent to us
  - -E0/E10/E15 data analysis (fuels 17,18,19):
  - -regulated pollutants information agrees with DOE splash blend
  - -toxics/PM –fuel formulation concerns on toxics-need other fuels
  - * -cold start focus – George analysis compares well with DOE
- -Phase 3
  - * -Fuels and blending status - Some fuels still in process
  - -Start testing 3/16:
    - -10 vehicles
    - -EPA E0 and E10 fuels at SWRI on start date
    - -Fuel to be randomized as made available
    - -New prep procedures implemented until we can quantify "hangover"
    - -NMHC formula finalized
    - -Launch with no toxics fuels

- -Additional vehicle testing:
  - * -FTPs (Chet) Phase 1B on 6 vehicles completed
    - -analysis done find s expected results on sample size/selection
    - -Previous fuel "hangover" on controls discovered – implement prepping changes
  - *-NLEV/T1- 2 CRC vehicles – Delayed in phase 3
    - -tie data back to complex model and DOE testing
    - -FTP or LA92 cycle selection still open issue
- -Other options or testing
  - -95F and 20 FLA92 – DOE to pursue
  - -Sulfur NVFEL program to tie back same vehicles
- -OBD data good for all phase 3
  - -need to look at closely to see fuel aromatic and ethanol impacts

2) Oil study (Christianson, Sobotowski, Fernandez) –Report will be issued at later date

3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
- -test cell improvements required – Joe M. trip results
- -sampler equipment required – in-house project
- -NVFEL to do round robin – some PM work – E85
- -Phase 3 above may have additional DOE data

4) Nonroad exhaust program (Caffrey) Intertek/Carnot
- -Fuel 18 testing stautus
- -Testing and aging (1/2 FUL) status
  - -Completed engines
  - -Remaining funds for FUL on handhelds only
- *-Additional testing in conjunction with ARB program (budgeted for 09)
  - -SOW complete for exhaust on indolene and E10
  - -speciated data on ARB program

*5) Evap testing (Hart) – Visit to SWRI
- -E77-2
- -E77-2b -work statement accepted – need additional 100k
- -E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB
- -E77-2c to include E20 – not EPA program

Newer:
-Need to get resolution to drift issue – DOE satisfied and will pay for additions
-NMOG reporting on E10/E15/E20 –FID response request to LOD
-FE calculation update – in recalculated phase 1 – available?
-CRC spring presentations limited to only a few

EPAct bi-weekly update mtg. 2-10-2009

FFV fails NOx going E15 → E10 → E0 so for Phase III will need to reset controller

Bag 2

1) Light-duty exhaust program (Sobotowski, Hart)
- -Phase 1 – completed (DOE data also received to compare)
- -E0/E10/E15 data analysis
  - -regulated pollutants
  - -toxics/PM – use for RFS2 undecided due to fuel formulation concerns
  - * -cold start focus – George analysis compares well with DOE
- -Fuel speciation
  - -17,18,19 TA for SWRI analysis
  - -all fuels will have additional analysis in later round robin
- * -Phase 2 - 50F tests – to be complete this week
- -Phase 3 – Work plan done – program to begin in late February
- * -Fuels and blending status for phase 3 fuels

Kent – Hawkins – selection to topics data?

- -Additional vehicle testing to be performed:
  - * -FTPs (Chet) Phase 1B on 6 vehicles completed
  - *-NLEV/T1- 2 CRC vehicles in repair – test in phase 3
    - -tie data back to complex model and DOE testing
    - -FTP or LA92 – may decide based on FTP Tier2 results
- -Other options or testing
  - -95F LA92 – DOE to pursue
  - -Evaporative – likely covered by E77-3 but different T2s
  - -PM studies?
  - -Sulfur supplement to NVFEL program?
- -OBD data good in P1 fuel 19 – did change a couple of parameters for 50F

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Newer:
-FTP results: reprocessed for unit change from LA92, need George analysis, Cay copy
-Need to get resolution to drift issue – DOE satisfied and will pay for additions
-NMOG reporting on E10/E15/E20 –FID response request to LOD
-FE calculation update – in recalculated phase 1 – available?
-CRC spring presentations limited to only a few
-SWRI costs estimates improving
-Sulfur program fuel not available until January plus cell updates occurring
-Concerns over FTIR and Mass spec. data – Cay – SWRI answer

EPAct bi-weekly update mtg. 1-27-2009

1) Light-duty exhaust program (Sobotowski, Hart)
- -Phase 1 – completed (DOE data also received to compare)
- -E0/E10/E15 data analysis
  - -regulated pollutants
  - -toxics/PM – use for RFS2 undecided due to fuel formulation concerns
  - * -cold start focus – George analysis compares well with DOE
- -Fuel speciation
  - -17,18,19 TA for SWRI analysis
  - -all fuels will have additional analysis in later round robin
- * -Phase 2 - 50F tests – to be complete end of January– Rafal and Connie visited
- -Phase 3 – Work plan being prepared – to begin in February
- * -Fuels and blending status for phase 3 fuels
  - -Significant updates – Rafal has almost all fuels designed – many made
  - -Requested (1) additional E10 with low sulfur to access Acet. Impact – Rafal design
- -Additional vehicle testing to be performed:
  - * -FTPs (Chet) Phase 1B on 6 vehicles completed
  - *-NLEV/T1- 2 CRC vehicles in repair – test in phase 3
    - -tie data back to complex model and DOE testing
    - -FTP or LA92 – may decide based on FTP Tier2 results
  - *-Sensitive vehicles – dropped- DOE may do in catalyst aging
- -Other options or testing
  - -95F LA92 – DOE to pursue
  - -Evaporative – likely covered by E77-3 but different T2s
  - -PM studies?
  - -Sulfur supplement to NVFEL program?
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- -test cell improvements required – Joe M. trip
- -sampler equipment required – in-house project
- -NVFEL to do round robin – some PM work – E85

4) Nonroad exhaust program (Caffrey) Intertek/Carnot – almost done except 1 HH
- -Fuel 18 testing stautus
- -Testing and aging (1/2 FUL) status ↳ no speciation!
  - -Completed engines
  - -Remaining funds for FUL on handhelds only
- *-Additional testing in conjunction with ARB program (budgeted for 09) no data yet
  - -SOW complete for exhaust on indolene and E10
  - -speciated data on ARB program
- -Look into testing at EPA new dynos in future for any gaps

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EPAct bi-weekly update mtg. 12-02-2008

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  - -17,18,19 TA for SWRI analysis
  - -all fuels will have additional analysis in later round robin
- * -Phase 2 - 50F tests – started 11/17 – Rafal and Connie visit — data coming now
- -Phase 3 – Work plan being prepared – to begin in February
- * -Fuels and blending status for phase 3 fuels
  - -Significant updates - Rafal
  - -Requested (1) additional E10 with low sulfur to access Acet. Impact – Rafal design
- -Additional vehicle testing to be performed:
- * -FTPs (Chet) Phase 1B on 6 vehicles completed
  - *-NLEV/T1- 2 CRC vehicles in repair – test in phase 3
    - -tie data back to complex model and DOE testing
    - -FTP or LA92 – may decide based on FTP Tier2 results
  - *-Sensitive vehicles – dropped- DOE will do in catalyst aging
- -Other options or testing
  - -95F LA92 – DOE to pursue
  - -Evaporative – likely covered by E77-3 but different T2s
  - -PM studies?
  - -Sulfur supplement to NVFEL program?
- -OBD data good in fuel 19 – did change a couple of parameters for 50F

Ed Nam wants to have input on modal data analysis

Marion wants FTIR/ocms for E0 & E10 in Phase III

for MOVES... need modal data

(currently only getting it on E85)

2) Oil study (Christianson, Sobotowski, Fernandez) –Report will be issued at later date
3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
- -test cell improvements required – Joe M. trip
- -sampler equipment required – in-house project
- -NVFEL to do round robin – some PM work – E85

4) Nonroad exhaust program (Caffrey) Intertek/Carnot
- -Fuel 18 testing stautus
- -Testing and aging (1/2 FUL) status
  - -Completed engines
  - -Remaining funds for FUL on handhelds
- *-Additional testing in conjunction with ARB program (budgeted for 09)
  - -SOW complete for exhaust on indolene and E10
  - -speciated data on ARB program
- -Look into testing at EPA new dynos in future for any gaps

*5) Evap testing (Hart) – Visit to SWRI

E-77 Summit 12/17

- -E77-2 E10 in SHEDs
- -E77-2b -work statement accepted – need additional 100k more E10 in SHEDS, speciated
- -E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB – how often do leaks occur??
- -E77-2c to include E20 – not EPA program

Newer:
- -FTP results: reprocessed for unit change from LA92, need George analysis, Cay copy
- -Need to get resolution to drift issue – DOE satisfied and will pay for additions
- -NMOG reporting on E10/E15/E20 –FID response request to LOD
- -FE calculation update – in recalculated phase 1 – available?
- -CRC spring presentations limited to only a few
- -SWRI costs call today
- -Sulfur program fuel not available until January plus cell updates occurring

Rafal wants to rebleed Fuel 5 — $20K

EPAct bi-weekly update mtg. 10-21-2008

1) Light-duty exhaust program (Sobotowski, Hart)
   - -Phase 1 – completed
   - -E0/E10/E15 data analysis
     - -regulated pollutants
     - -toxics/PM
     - -cold start focus
   - -Fuel speciation
     - -17,18,19 TA for SWRI analysis
     - -all fuels will have additional analysis in later round robin
   - -Phase 2 - 50F tests
     - -proceeding with requirement to start at 50F after 75F FTP testing is completed
   - -Phase 3 – Work plan being prepared
   - -Fuel blending status for phase 3 fuels
     - -Spreadsheet approach working now (not actual Aspen software)
       - -(7) E0 fuels designed- 2 done 5 handblends need minor changes
       - -(2) E10 fuels designed –handblends being checked - adjusted
   - -Additional vehicle testing to be performed:
     - -FTPs (Chet) Phase 1B on 6 vehicles started 10/21
     - -NLEV/T1 (2 CRC vehicles in process of being shipped)
       - -tie data back to complex model and DOE testing
       - -FTP or LA92 – may decide based on FTP Tier2 results
     - -Sensitive vehicles (Chet/Ed) PZEV/HMC. – still investigating
   - -Other options or testing
     - -95F LA92 – DOE to pursue
     - -Evaporative – likely covered by E77-3 but different T2s
     - -PM studies?
     - -Sulfur supplement to NVFEL program?
   - -OBD data good in fuel 19 – did change a couple of parameters for 50F
2) Oil study (Christianson, Sobotowski, Fernandez) –Report will be issued at later date.
3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
   - -test cell improvements required – Joe M. trip
   - -sampler equipment required – in-house project
   - -NVFEL to do round robin – some PM work – E85
4) Nonroad exhaust program (Caffrey)
   - -Fuel 18 received and being tested
   - -Testing and aging (1/2 FUL) status
     - -Completed engines
   - -Additional testing in conjunction with ARB program
     - -SOW complete for exhaust on indolene and E10
     - -speciated data on ARB program
   - -$ issue – Look into testing at EPA??
5) Evap testing (Hart)
   - -E77-2
   - -E77-2b -work statement accepted
   - -E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB

New:
- -09 Budget - last week E77-2b and E77-3 needed additional funds
- -David Hawkins cell temperature analysis – please review and we will repeat for 50F
- -Relaxing repeat requirements –vehicle specific based on phase 1 variability?
- -PM repeat requirement- need to understand PM behavior on gasoline vehicles at very low PM levels
- -NMOG reporting on E10/E15/E20
- -INNOVA measurement methods development need?
- -Help needed to control and track fuel samples and barrels at NVFEL/SWRI/other for all programs/RR
- -FE calculation update

need to talk to Kevin this to get started now (Rafal, Annie)

done by end of Jan.

done 3 weeks ?

will include VOC speciation

Mike C. thinks for Sampler will be done in time for NRMRL

EPAct bi-weekly update mtg. 9-23-2008

1) Light-duty exhaust program (Sobotowski, Hart)
- -Phase 1 – completed
- -E0/E10/E15 data analysis status
  - -regulated pollutants
  - -toxics/PM
- -Phase 2 – Cell in preparation for 50F
- -Phase 3 – Work plan being prepared
- -Fuel blending status for phase 3 fuels
  - -Aspen integration of distillation and other fuel properties – in process
  - -Fuel blending recipes for handblends – awaiting Aspen updates
- -Additional vehicle testing to be performed:
  - -FTPs (Chet) Phase 1B on select vehicles (5-6)
  - -NLEV/T1 tests to tie data to previous assumptions (2-4 CRC vehicles)
  - -Sensitive vehicles (Chet/Ed) PZEV/Hy. – still investigating
- -Other options or testing
  - -95F LA92 – DOE to pursue
  - -Evaporative
  - -PM studies
  - -Sulfur
- -OBD data good in fuel 19

John says: look at Tier 2 from CRC E-74b

2) Oil study (Christianson, Sobotowski, Fernandez)
- -Ethanol impacts - completed
- -Aging impacts – completed
- -Report

3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
  - -number of vehicles
  - -temperatures
- -NVFEL to do round robin – some PM work – E85

4) Nonroad exhaust program (Caffrey)
- -Fuel 18 received and being tested
- -Testing and aging (1/2 FUL) status
  - -Completed engines
- -Additional testing in conjunction with ARB program
  - -SOW complete for exhaust on indolene and E10
  - -speciated data on ARB program

5) Evap testing (Hart)
- -E77-2
  - -data results
- -E77-2b
  - -work statement completed
- -E77-3
  - -partially approved by OMB

Deliverable dates for data:
- -EPAct exhaust
- -EPAct Evaporative
- -Non-road

EPAct bi-weekly update mtg. 9-9-2008

1) Light-duty exhaust program (Sobotowski, Hart)
- -Phase 1 – completed
- -E0/E10/E15 data analysis status
  - -regulated pollutants
  - -toxics P/M
- -Phase 2 – Cell in preparation for 50F
- -Phase 3 – ~~WA~~ being prepared (were plans? WA?)
- -Fuel blending status for phase 3 fuels
  - -Aspen integration of distillation and other fuel properties – in process
  - -Fuel blending recipes for handblends – awaiting Aspen updates
- -additional vehicle testing:
  - -Evaporative testing integrated into phase 3
  - -FTPs (Chet) Phase 1B
  - -Sensitive vehicles (Chet/Ed) PZEV/Hy.
  - -NLEV/T1 tests to tie data to previous assumptions
  - -95F LA92 – DOE to pursue
  - -PM studies
  - -Sulfur
- -OBD data good in fuel 19

working on speciating evap? from T2

2) Oil study (Christianson, Sobotowski, Fernandez)
- -Ethanol impacts - completed
- -Aging impacts – completed
- -Report

3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
  - -number of vehicles
  - -temperatures
- -NVFEL to do round robin – some PM work – E85

4) Nonroad exhaust program (Caffrey) — getting diff. results from DOE
- -Fuel 18 received and being tested
- -Testing and aging (1/2 FUL) status
  - -Completed engines
- -Additional testing in conjunction with ARB program
  - -SOW exhaust only..., no evap.
  - -speciated data on ARB program

done Nov.

Indolene + ARB's E10

5) Evap testing (Hart)
- -E77-2
  - -data results
- -E77-2b
  - -work statement completed
- -E77-3
  - -partially approved by OMB

by June

Deliverable dates for data:
- -EPAct exhaust
- -EPAct Evaporative
- -Non-road

Data location map

outstanding issues
- speciated fuels? or can Rafal calculate from blendstocks
- composite EFs for ~~aromatics~~ alcohols?

how are they calculating composites?

how were they doing non-starts?

EPAct bi-weekly update mtg. 8-26-2008

1) Light-duty exhaust program (Sobotowski, Hart)
- -Fuel blending status
  - -Problems with Fuel 9 distillation curve
  - -Authorized Haltermann to do 3-4 more hand blends
- -Testing status
- -E0/E10/E15 data analysis status
  - -regulated pollutants
  - -toxics
  - -OBD data
- -Vehicle downtime/non-intrusive testing options
  - - Addition of Tier 1 or NLEV vehicles proposed to tie this program back to studies used in RFS 1
  - -Evaporative testing in phase 3
  - -FTPs or US06
  - -95F LA92 – DOE to pursue
  - -PM studies
  - -Sulfur
- -Cold temp testing setup
  - -Horiba analyzers being installed
  - -Cold Temp chamber NOT yet installed (subcontractor problems)
- -Other issues

Paul doesn't want downtime: just start w/ the Phase III fuels we have.

2) Oil study (Christianson, Sobotowski, Fernandez)
- -Meeting with Lubrizol 8/8/08 a success
- -In-use fuel (Brewers) determined to be BP E10 gasoline
- -Additional data analysis to be conducted by George Hoffman as second priority (after SwRI data)
- -Chet briefing on final analysis results as next step

mid-Sept?

3) PM speciation (Christianson, Hoyer)
- -ORD and NVFEL round-robin planning continues
  - -Site modifications needed to become 1065 compliant
    - -dP for tailpipe depression
    - -Humidity control for dilution air
    - -NFVEL PM tunnel may be sent down
- -ORD site visit planned for mid-september

LOD, Joe McD.

- -AVL Toxic sampler delivery is still the biggest unknown for program start

4) Nonroad exhaust program (Caffrey)
- -E0 and E10 testing is 33% complete (proj. finish in November)
- -E15 and E20 testing to be done with EPAct fuel 19 (plus splash blending to E20)

DOE

- -Additional testing in conjunction with ARB program

5) Evap testing (Hart)
- -E77-2
  - -data results
- -E77-2b
  - -work statement completed
- -E77-3
  - -approved by OMB

EPAct Test programs weekly meeting – March 18, 2008

Standing agenda:

1) Light-duty exhaust program (Sobotowski, Hart)
   - -fuels
   - -vehicles
   - -EPA portion
   - -DOE portion
   - -kick-off schedule

testing to start 4/7

"high emitters" will be at end of Phase III, agreed on a high-mileage vehicle

Issued:
- fuel storage (PM speciation)
- ESS (blend our own or use same as SwRI)

2) Oil study (Christianson, Sobotowski)
   - -status update
   - -initial findings

skipping some methane measurements.

3) PM speciation/SVOC/metals (Christianson, Hoyer)
   - -available lab capabilities

4) Nonroad exhaust program (Scarbro)
   - -status
   - -ARB program?

5) Evap testing (Hart)
   - -RSD
   - -sheds

6) DOE mid-level blend testing (Fernandez)
   - -non-road
   - -vehicles (9)

7) Public drive data repository (Butler, Fernandez)
   - -living master document on data
   - -actual data sets